

WHAT IS CLAIMED IS:

1 1. A weighing pan operable to weigh a test weight on a comparator
2 balance, wherein said weighing pan comprises:
3 a coated surface with a coating of a polymer lacquer, wherein said
4 coated surface in relation to said test weight has a first sliding friction and a first
5 adhesive friction that are at least twice as strong, respectively, as a second sliding
6 friction and a second adhesive friction between the test weight and a non-coated,
7 polished surface of an analogous weighing pan made of hard metal.

1 2. The weighing pan according to claim 1, wherein the polymer
2 lacquer comprises:
3 a base material and additional components including a hardening agent.

1 3. The weighing pan according to claim 2, wherein the base material
2 comprises polyurethane.

1 4. The weighing pan according to claim 1, wherein the polymer
2 lacquer contains antistatic agents in a proportion not exceeding three percent by
3 weight.

1 5. The weighing pan according to claim 1, wherein the coating is at
2 least 10 micrometers thick.

1 6. The weighing pan according to claim 1, wherein the coating has a
2 Shore D hardness of more than 50.

1 7. The weighing pan according to claim 1, wherein the coating is
2 resistant to solvents.

1 8. The weighing pan according to Claim 1, wherein the coating is
2 resistant to fluids used in measuring the density of bodies, said fluids belonging to
3 the group consisting of water, FC40 fluorocarbon, and silane-containing fluids.

1 9. The weighing pan according claim 1, the weighing pan being
2 configured to cooperate with a platform of a weight changer for transferring the
3 test weight, wherein the platform is movable up and down relative to the weighing
4 pan while the weighing pan reaches through the platform without making contact
5 with the platform.

1 10. The weighing pan according claim 9, wherein the platform
2 comprises a platform surface coated with the polymer lacquer.

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